

# Dopamine Antibody – Rabbit Polyclonal

Ref: IS1005

Cited in 14 papers, the anti-dopamine antibody IS1005 was used to evidence dopamine in mouse primary & iPS-derived neurons, human brain tissues and stem-cell derived brain organoids. Combined with the [STAINperfect immunostaining kit A](#), this rabbit polyclonal antibody enables high-quality dopamine imaging.

<b>Clonality</b>	Polyclonal antibody
<b>Host</b>	Rabbit
<b>Reactivity</b>	Reacts with all species
<b>Tested samples</b>	Whole mounts, cell culture, tissue sections, organoids
<b>Staining procedure Format</b>	<a href="#">STAINperfect immunostaining kit A</a>
<b>Format</b>	50µl (approx. 40 tissue sections)
<b>References</b>	<a href="#">Cited in 14 papers</a>

## INFORMATIONS

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### Product overview

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<b>Product name</b>	Dopamine antibody – Rabbit pAb
<b>Synonyms</b>	Anti-Dopamine antibody Anti-3,4-dihydroxyphenethylamine antibody Anti-DA antibody Anti-hydroxytyramine antibody Anti-oxytyramine
<b>Immunogen</b>	Conjugated Dopamine
<b>Specificity</b>	When tested in competitive ELISA, the anti-conjugated Dopamine antibody did not show any significant cross reactivity with Tyramine and L-Dopa conjugates
<b>Volume</b>	50 µl

### Storage

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<b>Form</b>	Liquid
<b>Purity</b>	Purified anti-serum
<b>Storage</b>	Store at +4°C for short term (6 months). Aliquot and store at -20°C for long term. Avoid repeated freeze / thaw cycles
<b>Material safety datasheet</b>	<a href="#">Download MSDS</a>

# PROTOCOLS

## IF - Cell cultures, Whole mounts, Tissue sections

Dilute antibody with the antibody diluent provided in the [STAINperfect immunostaining kit A](#). Use at 1/250 -1/1000 dilution. Follow the STAINperfect protocol suited to your sample

### Comments

Optimal working dilutions must be determined by the end-user

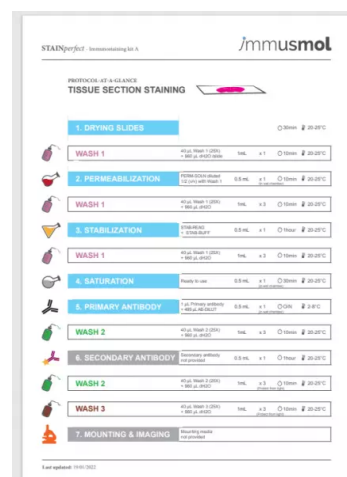
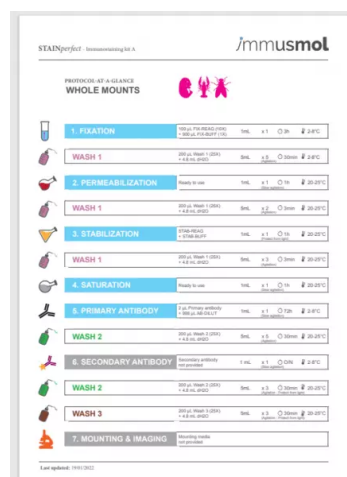
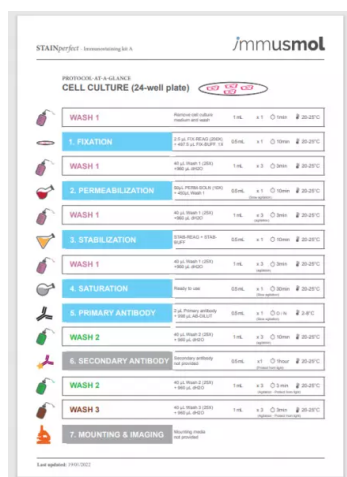
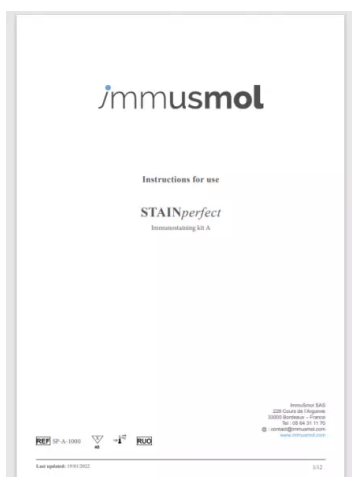
### Restrictions

For research use only

### Full protocol

[Download STAINperfect protocol for dopamine staining](#)

### Protocols-at-a-glance



[Complete Instructions for Use](#)

[Protocol-at-a-glance for cell cultures](#)

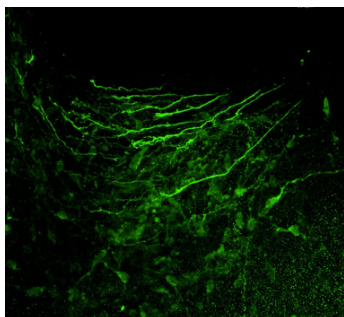
[Protocol-at-a-glance for whole mounts](#)

[Protocol-at-a-glance for tissue sections](#)

# REFERENCES

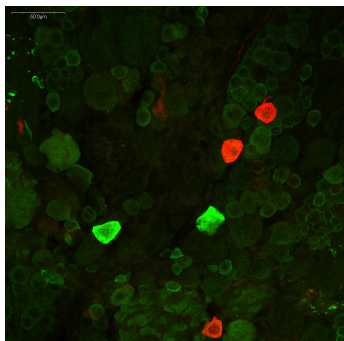
### Product citation

## Product pictures



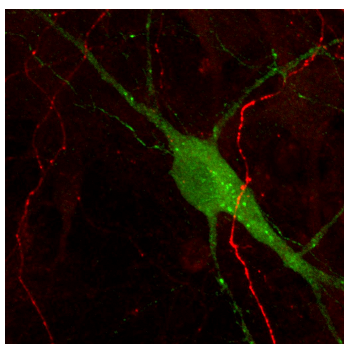
### **Dopamine imaging in mouse embryonic mesencephalic neurons (E13.5)**

Using STAINperfect immunostaining kit A, Dopamine (green) was detected within mouse embryonic mesencephalic neurons (E13.5) following the protocol optimized for whole mount samples. Stainings were performed using ImmuSmol rabbit anti-Dopamine polyclonal Ab (IS1005) and standard mouse anti-TH antibody. Fluorescent conjugated antibodies were used and images acquired by confocal imaging.



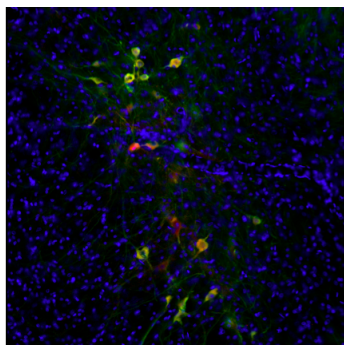
### **Dopaminergic and serotonergic neurons in crayfish brain**

Immunostaining of dopaminergic and serotonergic brain neurons of a crayfish. Staining was performed with STAINperfect immunostaining kit A, following the protocol for whole mount samples. Fluorescent secondary antibodies were used and pictures were acquired by confocal imaging with high magnification.



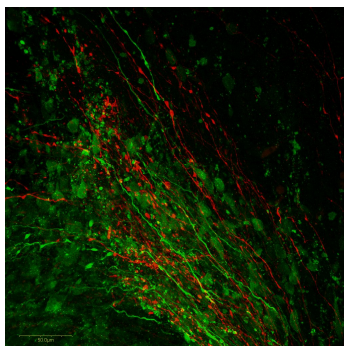
### **Immunostaining of Dopamine and Serotonin immunostaining in mouse culture of primary midbrain neurons**

Dopamine and Serotonin were stained in mouse culture of primary midbrain neurons using STAINperfect immunostaining kit A. Staining were obtained following the protocol optimized for cell culture using IS1005 rabbit polyclonal antibody against Dopamine and IS0135 goat polyclonal antibody against Serotonin. Fluorescent conjugated secondary antibodies were then used and imaged by confocal imaging.



### **Dopaminergic neurons of the Substantia Nigra pars compacta (SNc) in coronal rat brain sections**

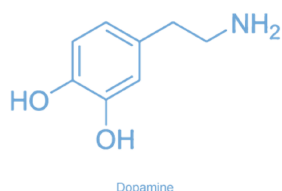
Revealed by anti-dopamine (DA, rabbit polyclonal antibody #IS1005) and Tyrosine Hydroxylase (TH, #MAB5280, reference catecholaminergic neuron immunostaining). As highlighted in the overlay, DA immunoreactivity well correlates with TH immunoreactivity in the SNc, thus showing that our antibody against the DA neurotransmitter - used with the STAINperfect immunostaining kit A - is a validated tool to directly highlight DAergic systems rather than through biosynthesis enzyme immunostaining, expressed in all catecholaminergic cell populations.



### Dopamine and Serotonin immunostaining in the CNS of embryonic mouse

Using STAINperfect immunostaining kit A, Dopamine (green) and Serotonin (red) were stained in the CNS of embryonic mouse E13.5. Staining were obtained following the protocol optimized for whole mount using IS1005 rabbit polyclonal antibody against Dopamine and IS0135 goat polyclonal antibody against Serotonin. Fluorescent conjugated secondary antibodies were then used and images captured by confocal microscopy at high magnification.

### Dopamine (3,4-dihydroxyphenethylamine)



Dopamine (DA) is a catecholamine neurotransmitter and hormone synthesized from L-DOPA. Playing a key role in motor, motivational and cognitive functions, brain dopaminergic systems are found to be altered in a number of pathological states, including Parkinson's disease, attention deficit hyperactivity disorder (ADHD), drug addictions, pain and behavioral disorders. At the peripheral level, dopamine is an important regulator of blood flow, which also exerts paracrine and exocrine effects on immune cells, renal proximal tubular cells and as well as pancreatic cells.

## Contact information

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**To order, review, ask for technical support, visit product page at:**

<https://www.immusmol.com/shop/dopamine-rabbit-pab/>